

REMARKS

Claims 1-18 and 20-21 are pending in this application. Claims 19 and 22 were previously withdrawn.

35 U.S.C. § 112

Claims 2 and 20 have been amended to correct the typographical errors indicated in the December 30, 2005 office action. In claim 2, “hardmask” has been replaced with “hard mask.” In claim 20, “later” has been replaced with “layer.” It is respectfully requested that the 112 rejection be withdrawn.

35 U.S.C. § 103(a)

Claims 1-18 and 20-21 were rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (6,683,815) hereafter “Chen.” Claims 1-18 and 20-21 are patentable over Chen.

Independent claim 1 is directed to “a method for making a memory structure having different-sized memory cell layers,” and claim 20 is directed to “a method for making a memory structure having different-sized data and reference layers.” The discussion of Figure 4 in Chen focuses mostly on the resultant structure of the data, spacer and reference layers as depicted in Figure 4. In column 16, lines 3-13, Chen does mention that two etching steps can be used in the memory cell fabrication process, but does not discuss laterally reducing a mask layer after it has been used as a first etch transfer mask for use as a second etch transfer mask. Thus, Chen fails to teach or suggest at least “laterally reducing a planar dimension of said at least one mask layer to be narrower than said ferromagnetic materials” of independent claim 1 and at least “etching said mask to be narrower than said memory cell in at least one lateral dimension” of independent claim 20.” Thus, independent claims 1 and 20 are patentable over Chen.

Dependent claims 2-18 depend from claim 1, and claim 21 depends from claim 20. The arguments with respect to claims 1 and 21 are applicable to them as well.

Applicant respectfully requests that any future office actions identify which portions of the cited art teach each claim element of Applicants’ claims. The office action of December 30, 2005, describes Figure 4 of Chen as “a laminate structure [that] is

formed of an upper magnetic layers (24)/ a non-magnetic layer (26)/ a lower magnetic layers (28)” and states that “They disclose that any of a variety of different etching methods may be employed to fabricate this step shaped laminate structure including those methods which employ wet and/or dry etching processes.” There is no relation of Chen teachings to the individual elements recited at least in Applicants’ independent claims which are directed to the specific elements of making a memory structure having different-sized layers. It is difficult to understand how a broad statement that “They disclose that any of a variety of different etching methods may be employed to fabricate this step shaped laminate structure” discloses the specific elements recited in Applicants’ claims.

Additionally, it is unclear exactly which elements of the pending claims he is relying on official notice for disclosing. It is respectfully requested that if the Examiner continues with rejection of the claims, particularly with a 103(a) rejection, that he provide a second reference for the combination that discloses what elements he believes are so well known and tracks his citations to the specific elements of Applicants’ claims so Applicants can better follow his argument.

Conclusion

In light of the remarks presented above, pending claims 1-18 and 20-21 as amended are in condition for allowance, and applicants respectfully request a prompt notice of allowance.

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Respectfully Submitted on Behalf of Applicants

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